

The Texas Commission on Environmental Quality (commission or TCEQ) adopts new §§101.150, 101.151, 101.153, and 101.155.

New §§101.150, 101.153, and 101.155 are adopted *with changes* to the proposed text as published in the December 25, 2009, issue of the *Texas Register* (34 TexReg 9311). New §101.151 is adopted *without change* to the proposed text and will not be republished.

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

House Bill (HB) 1526 of the 80th Legislature (2007), codified in Texas Health and Safety Code (THSC), §382.401, and in Texas Water Code, §5.752(2), requires the commission to establish by rule a program that allows the owner or operator of a facility to voluntarily use as a supplemental detection method any leak detection method that has been incorporated and adopted by the United States Environmental Protection Agency (EPA) into a program for detecting leaks or emissions of air contaminants. The only known contaminant for which alternative leak detection technology is applicable is Volatile Organic Compounds (VOC). On December 22, 2008, EPA adopted its rule regarding Alternative Work Practice to Detect Leaks from Equipment (73 *Federal Register* 78199).

These rules provide incentives for participation in a voluntary leak detection program. Incentives include compliance history-based penalty reductions and conditional limit to enforcement action.

These new rule sections will not be submitted as a revision to the State Implementation Plan (SIP) under the Federal Clean Air Act, codified at 42 United States Code (USC), §7401 *et seq.* This incentive program is not required by federal law or by the existing Texas SIP.

This rulemaking addresses leaks from components or equipment that are not subject to the commission's regulatory program for leak detection and repair (LDAR) components. Leaks from LDAR components are addressed in the commission's rulemaking in 30 TAC Chapter 115 for Alternative Work Practice (AWP) standards (Rule Project 2009-030-115-EN) to incorporate an AWP similar to the work practice adopted by the EPA. The AWP uses similar imaging-based technology for required fugitive leak detection.

#### SECTION BY SECTION DISCUSSION

The commission adopts new §101.150, Purpose and Applicability, which describes the purpose of new Subchapter C regarding the Supplementary Leak Detection program. It sets forth the applicable facilities and equipment that may be included in the program.

The commission adopts new §101.150(a), which describes the program as a means to encourage, through incentives, the use of alternative leak detection technology with subsequent timely repairs that are made on components not subject to commission rules for LDAR in effect on the date of detection. This subsection also clarifies that a failure to comply with the subchapter will result in an ineligibility to receive an incentive in §101.155, but will not result in a violation of a commission rule or permit subject to commission enforcement.

The commission adopts new §101.150(b), which provides a scope of equipment or components that are eligible for this program. The scope is written by exception, where all equipment or components except

that under a required fugitive monitoring program, or that required by permit or rule to use the alternative leak detection method may qualify for the program.

The commission adopts new §101.151, Voluntary Supplemental Leak Detection Definitions, which defines terms used in this new subchapter. This section defines alternative leak detection technology, imaging, leak, optical gas imaging instrument, repair, and supplemental detection method for the express purposes of this program.

The commission adopts new §101.153, Voluntary Supplemental Leak Detection Program, that describes the general program objectives, elements of an approvable program, exceptions, repair, and recordkeeping requirements for the owner or operator participating in this program.

The commission adopts new §101.153(a), which describes the general program to encourage supplementary LDAR.

The commission adopts new §101.153(b), which outlines the minimum requirements for an owner or operator to qualify to include annual surveys, minimum equipment specifications, and operator training requirements when optical gas imaging technology is used. Equipment specifications are consistent with EPA's specifications for imaging equipment in their AWP rules. A log of the operator's operational experience, which can be maintained in any form, is required if the minimum 100 hours per year option is selected. The 100 hour requirement changed from proposal to adoption. It was proposed as 100 hours per calendar year. In response to comment, it was changed to 100 hours annually because this accomplished the same purpose without the unnecessary constraint that the 100 hours be obtained in each calendar year.

The commission adopts new §101.153(c), which lists the types of emissions and leak records that cannot be used under this program. Emissions and leak records that are excluded from use in this program include those that were part of an investigation, records of audits conducted under The Texas Environmental, Health, and Safety Audit Privilege Act, and emissions from equipment or facilities that lack authorization.

The commission adopts new §101.153(d), which describes the minimum requirements for supplemental LDAR activities to be met in order to qualify for the program incentives. These requirements include a 45-day baseline repair deadline with exceptions for process unit turnaround and size and complexity of repair, and that the leak and its repair had not caused a nuisance as defined in §101.4.

The commission adopts new §101.153(e), which describes the records required by the owner or operator conducting leak detection under this program. These records include information that supports the elements of an approvable program, and each supplemental LDAR made in accordance with this subchapter.

The commission adopts new §101.155, Program Incentives, which describes how the commission will provide incentives that encourage voluntary supplemental leak detection, and conditions upon which those incentives will be awarded. This implements the statutory requirement in THSC, §382.401(b) to provide regulatory incentives to encourage voluntary use of the alternative leak detection technology.

The commission adopts new §101.155(1), which acknowledges the owner or operator's participation in this program may be reflected on the facility's compliance history in accordance with 30 TAC Chapter 60. Specifically, facilities using alternative technologies under the new rule and complying with all necessary actions in the rule may receive credit for participation in a voluntary pollution reduction program. Participation in this program will not act as a component which calculates into the compliance history score. Participation in this program will be reflected on the compliance history report and act as a mitigating factor when a facility has a classification of poor performer. According to 30 TAC §60.2(e)(3), "the executive director shall evaluate mitigating factors for a site classified as a poor performer." The evaluation to mitigate a facility from a poor performer to an average performer is processed within the Enforcement Division with input from other areas of the agency prior to the annual posting of compliance history classifications to the commission's Web site. In addition, the Enforcement Division may evaluate a facility for mitigation in the event that a compliance history appeal is submitted by the owner or operator of the facility, per 30 TAC §60.3(e).

The commission adopts new §101.155(2), which provides the incentive for exemption from enforcement on the condition that the exemption be consistent with federal requirements.

THSC, §382.401(b) also states that the commission may offer other incentives that are not included in these rules. For example, the commission has implemented an on-site technical assistance program as authorized by THSC, §361.509(a)(7), which authorizes the commission to provide to business and industry, as resources allow, on-site assistance in identifying potential source reduction and waste minimization techniques and practices, and in conducting internal source reduction and waste

minimization audits. Because this is an established program which is available to all regulated entities regardless of whether alternative leak detection technology is used, it is not included as part of this rule.

Also, THSC, §382.401(b) provides that credits or offsets to the facility's emissions reduction requirements based on the emissions reductions achieved by voluntary use of alternative leak detection technology may be an incentive. In order to create credits and offsets under state and federal law, they must be creditable, quantifiable, federally enforceable, permanent reductions that are also surplus reductions (they must not be relied upon to meet other requirements). If facilities want to generate offsets for new source review permitting purposes or as emission reduction credits, that must be done through an EPA-approved methodology. Although use of this technology is an approved methodology for identifying leaks under the federal AWP discussed elsewhere in this preamble, the use of the optical gas imaging technology cannot be a basis for generating offsets of credits because it doesn't meet at least one of the basic criteria, which is that the technology cannot quantify emissions. Therefore, the commission is not including this as a possible incentive. Additionally, the use of the technology cannot ensure that the emission reductions are not being implemented to meet another state or federal requirement. Leaks of unauthorized emissions, even if repaired, cannot qualify as creditable emissions.

THSC, §382.401(d), provides that as part of the program of incentives adopted under subsection (b) that the program include four components, which are styled as "incentives." The first two, in subsection (d)(1) and (2), is to ensure that certain leaks detected by voluntary use of alternative leak detection technology are repaired within an established reasonable period of time. The commission interpreted these as basic program requirements and included them in §101.153. The third and fourth program components, in subsection (d)(3) and (4), provide that reporting requirements be limited only to those whose components

that are not repairable within the commission's established reasonable repair time, and to provide exemptions from commission enforcement for leaks repaired within the established reasonable repair time. In contrast to subsection (d)(1) and (2), which are basic elements related to the purpose of the use of the camera, subsection (d)(3) and (4) may be considered to be program incentives because these are related to compliance with subsection (d)(1) and (2). The commission must interpret subsection (d) considering that the legislature would not adopt any statute that is unreasonable or impossible for the commission to implement. Because subsection (d) specifically references subsection (b), it is reasonable for the commission to interpret these four components as part of the overall program, and not as independent, separate requirements or incentives. The absence in subsection (d) of the legislature including a limitation based on consistency with federal law for the incentives allows and is reasonable for the commission to determine applicable federal law prior to establishing the incentives in commission rule. Further, subsection (e) specifically provides that the exemption from enforcement for any violation of law or a permit is specifically conditioned upon consistency with federal requirements. Inclusion of THSC, §382.401(d)(3) and (4) would be inconsistent with federal requirements, specifically the Texas SIP and the Title V Permitting Program under the Federal Clean Air Act. The Texas SIP includes reporting requirements for emissions associated with leaks and repair of leaks, such as for emissions inventories in §101.10 and excess emissions in §101.201 and §101.211. Reporting is also required by some permits which are also a part of the Texas SIP. Texas' approved Title V permitting program requires deviation reporting under 30 TAC §122.145, which is any indication of noncompliance with a term or condition of the permit as found using compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. Also, the Texas Title V program requires a set frequency of compliance certification reviews and on-site investigations to satisfy the Compliance Monitoring Strategy as required by EPA. Failure to satisfy that

strategy could result in EPA identifying concerns and taking action regarding the administration of the program. Therefore, scheduling of compliance inspections, as provided for in THSC, §382.401(b)(2)(B) was not addressed as an incentive in this adopted rulemaking.

In addition, both the SIP and the Title V Permitting Program do not allow any exemption from enforcement and also require that the commission have the authority to enforce both programs (*see* 42 USC, §7413). Failure to do so can result in a SIP call by EPA, withdrawal of permit program authorizations or other measures including sanctions, (*see* 42 USC, §7509 and §7661a). The commission is therefore limiting the incentive regarding exemption from enforcement and adopts the text of the statute which provides that, to the extent consistent with federal requirements, the commission may not take an enforcement action against a program participant owner or operator of for a leak or emission of an air contaminant detected using alternative technology and would not have been detected under the commission's LDAR program.

In addition, the commission has submitted, and EPA has previously approved, §101.221(d) which states, in part, that "the commission will not exempt sources from complying with any federal requirements. . . ." Federal requirements include all authorizations, both those in the new source review program and the federal operating (Title V) permits, as well as most of the TCEQ's air quality rules and air quality plans, as well as applicable federal rules. Therefore, to maintain the integrity of, and compliance with, the Texas SIP and the Title V Federal Operating Permitting Program, as well as to comply with THSC, §382.401(e), the commission cannot implement and is not implementing THSC, §382.401(d)(3) and (4) as incentives for the program required by THSC, §382.401(b) and (d).

#### FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the adopted rules in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the adopted rules do not meet the definition of a "major environmental rule." Furthermore, it does not meet any of the four applicability requirements listed in Texas Government Code, §2001.0225(a). A "major environmental rule" means a rule, the specific intent of which, is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted new rules implement HB 1526, 80th Legislature (2007) by developing an incentive program that allows the owner or operator of a facility to voluntarily use as a supplemental detection method any leak detection method that has been incorporated and adopted by the EPA into a program for detecting leaks or emissions of air contaminants. The adopted new rules will not adversely affect, in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

Further, the rules do not meet any of the four applicability criteria of a "major environmental rule" as defined in the Texas Government Code. Texas Government Code, §2001.0225 applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. The adopted new rules do not exceed a standard set by federal law or exceed an express

requirement of state law. There is no contract or delegation agreement that covers the topic that is the subject of the rules, although the Texas Title V program requires a set frequency of compliance certification reviews and on-site investigations to satisfy the Compliance Monitoring Strategy as required by EPA. As stated elsewhere in this preamble, failure to satisfy that strategy could result in EPA identifying concerns and possibly taking action regarding the administration of the program. Finally, the rules were not developed solely under the general powers of the commission, but are authorized by specific sections of the THSC and Texas Water Code that are cited in the STATUTORY AUTHORITY section of this preamble. Therefore, the rules are not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because the adopted new rules do not meet any of the four applicability requirements.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. No comments were received regarding the draft regulatory impact analysis determination.

#### TAKINGS IMPACT ASSESSMENT

The commission completed a takings impact analysis for the adopted new rules. The specific purpose of the rules is to implement an incentive program that allows the owner or operator of a facility to voluntarily use as a supplemental detection method any leak detection method that has been incorporated and adopted by the EPA into a program for detecting leaks or emissions of air contaminants.

Promulgation and enforcement of the adopted new rules would be neither a statutory nor a constitutional taking because they do not affect private real property. Specifically, the adopted new rules do not affect private property in a manner that restricts or limits an owner's right to the property that would otherwise

exist in the absence of a governmental action. Therefore, the adopted new rules do not constitute a takings under Texas Government Code, Chapter 2007.

#### CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the adopted rulemaking and found the adoption is a rulemaking identified in the Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2), relating to rules subject to the Coastal Management Program, and will, therefore, require that goals and policies of the Texas Coastal Management Program (CMP) be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Council and determined that the new rules are consistent with CMP goals and policies because the rules, which involves an incentive program that allows the owner or operator of a facility to voluntarily use as a supplemental detection method any leak detection method that has been incorporated and adopted by the EPA into a program for detecting leaks or emissions of air contaminants, will have no adverse environmental impact; will not have direct or significant adverse effect on any coastal natural resource areas; will not have a substantive effect on commission actions subject to the CMP; and promulgation and enforcement of the new rules will not violate (exceed) any standards identified in the applicable CMP goals and policies.

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received regarding the coastal management program.

#### EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

Information submitted in support of the voluntary supplemental LDAR program at sites subject to the Federal Operating Permits (FOP) Program may be used as potential credible evidence to indicate potential noncompliance (or compliance) with FOP terms and conditions and subject to deviation reporting.

#### PUBLIC COMMENT

The commission held public hearings in Dallas on January 19, 2010 at 10:00 am in the Irving Library; Austin on January 20, 2010 at 10:00 am in Building E, Room 201S, at the commission's central office located at 12100 Park 35 Circle; and in Houston on January 21, 2010 at 10:00 am in Conference Room B at the Houston-Galveston Area Council. The comment period closed on January 25, 2010. The commission received no oral comments at any of the hearings. The commission received written comments from The Sierra Club (Sierra Club), Texas Pipeline Association (TPA), Texas Chemical Council (TCC), and the Texas Oil & Gas Association (TxOGA).

#### RESPONSE TO COMMENTS

TxOGA requested deferral of implementation of this rulemaking until January 1, 2011, with initial reporting beginning on January 1, 2012. This request has been made because industry is being asked to adopt new technology and procedures that have not been in place before. In addition, oil and natural gas processors are expected to fall under mandatory fugitive monitoring provisions of the Mandatory Reporting of Greenhouse Gases Rule, Subpart W, Oil and Natural Gas Systems (GHG Reporting Rule). Since the GHG Reporting Rule monitoring requirement provisions have not yet been defined or implemented, participation in the Voluntary Supplemental Leak Detection Program cannot be fully assessed in terms of applicable eligibility or monitoring technology. Furthermore, additional time may be needed in terms of IR camera procurement and delivery.

**No changes were made in response to this comment. Because this rulemaking is voluntary and has no relationship to the GHG Reporting Rule the implementation of the rules will not be deferred until January 1, 2011.**

TxOGA noted that eligibility for participation in the Voluntary Supplemental Leak Detection Program may be lost when the GHG Reporting Rule monitoring provisions are finalized. As proposed, the provisions in the GHG Reporting Rule have more stringent monitoring requirements than §§101.150, 101.151, 101.153, and 101.155 due to the additional burden of quantifying detected leaks.

**No changes were made in response to this comment. This rulemaking has no relationship to the GHG Reporting Rule. It is speculation as to whether eligibility for participation in this program, which implements THSC, §382.401, will be lost if and when any new federal monitoring requirement for greenhouse gases becomes effective.**

TPA requested the TCEQ ensure that the rules are as broadly written as HB 1526 requires. Specifically, the TCEQ should clarify the statement that this rulemaking project addresses leaks from components or equipment that are not subject to the commission's regulatory program for LDAR components. TPA noted that this statement could be read as saying the commission intends to provide incentives for the use of innovative technologies to detect leaks only from non-LDAR components. If that is the TCEQ's intention, then such a plan appears to be contrary to HB 1526, because it does not appear that the requirements of HB 1526 are limited to non-LDAR components. In addition, TPA urged the commission to ensure that the new incentive program is as broad as HB 1526 requires, so that the incentives offered by the commission

are available regardless of whether the alternative leak detection methods are used on LDAR components or non-LDAR components.

**To ensure the rules accurately matched the statute in terms of scope, §101.150(a) was changed to describe how incentives would be provided for voluntary monitoring of "components not subject to commission rules for LDAR in effect on the date of detection." In addition, leaks from LDAR components are addressed in the commission's concurrent rulemaking in 30 TAC Chapter 115 for AWP standards to incorporate an AWP similar to the work practice adopted by the EPA. The AWP uses similar imaging-based technology for required fugitive leak detection.**

TCC commented that additional language should be included in §101.150(a) that lists the components applicable to the rule and mirrors language in the current highly-reactive VOC LDAR rules, specifically, components including, but not limited to, blind flanges, caps, or plugs at the end of a pipe or line containing VOC; connectors; heat exchanger heads; sight glasses; meters; gauges; sampling connections; bolted manways; hatches; agitators; sump covers; junction box vents; covers and seals on VOC water separators; and process drains. In addition, TCC recommended inclusion of a statement that would provide that failure to comply with the terms of this subchapter prevents a person from receiving the incentives of the program, but does not result in a determination of noncompliance with the commission permit, policy, rule, or statute. TCC noted that this additional language regarding compliance is an important component to add as the language would encourage participation in the program.

**The rule applies to equipment that is not included in the Method 21 LDAR programs. To ensure the rule accurately matched the statute in terms of scope, §101.150(a) was changed to describe how**

**incentives would be provided for voluntary monitoring of "components not subject to commission rules for leak detection and repair in effect on the date of detection." There was no longer a need to list Method 21 equipment after deleting the phrase "non-Method 21. . . ." The commission agreed to add a statement to clarify that failure to comply with the requirements of this subchapter will result in ineligibility for an incentive in §101.155 and that non-compliance with any requirement of this subchapter is not a violation of a commission permit or rule subject to commission enforcement action.**

TxOGA commented that the definition of leak is much less stringent than the current EPA Method 21 concentration based leak thresholds for LDAR programs.

**No changes were made in response to this comment. The definition of a leak in the rule is the same as the definition of a leak as adopted by EPA in its rule regarding Alternative Work Practice to Detect Leaks from Equipment (73 *Federal Register* 78199).**

TxOGA commented that the repair verification should be further defined to indicate repair based on no image with the camera under the same detection conditions and not defined in terms of any other supplemental detection method, such as use of an Organic Vapor Analyzer (OVA) or Total Vapor Analyzer (TVA) based on EPA Method 21.

**No changes were made in response to this comment. The definition of "repair" in §101.151(e) and the requirements for repair under §101.153(d) do not dictate the means to verify the repair. Section 101.153(e)(1)(B), requiring recordings of successful repairs to be maintained for five years, likewise**

**does not specify the type of record. The rules are not defining repair verification by any method, including the use of OVA or TVA based on Method 21.**

Sierra Club supported §101.153, specifically the following requirements: a schedule for leak surveys; the use of 40 Code of Federal Regulations (CFR) §60.18(i)(1) (December 22, 2008) for optical gas imaging instrument specifications and daily instrument check by each person that performs imaging; minimum training for operators; the 30-day leak repair deadline; that the leak must not cause a nuisance; and that records be kept for five years.

**The commission appreciates the comment.**

Sierra Club supported this rulemaking as required by the passage of HB 1526; however, Sierra Club asked the TCEQ to address quantification of leaks in the rules. Sierra Club commented that it is important if leak detection instruments are to be used which cannot determine the concentration level of a leak, then in some way a leak be quantified for emissions inventory and enforcement purposes. In addition, Sierra Club noted that the rulemaking does not provide for any quantification of a leak; therefore, making it difficult to determine if corrective actions have been completed.

**No changes were made in response to this comment. This rulemaking provides for the voluntary use of alternative leak detection technologies (currently optical gas imaging technology) to identify a leak, which, at this time, cannot quantify a leak or identify the constituents emitted. Other methods, such as those described in EPA's Method 21, must be used to quantify the leak and identify the constituents. These other methods are outside the scope of this rulemaking.**

TPA requested that TCEQ revise the rules to comply with the statutory requirement to establish reasonable repair periods in a way that includes consideration of the size and complexity of the repair. Certain sections of the proposed rules violate HB 1526, or contain insufficient detail as to the incentives being offered, and therefore must be rewritten. Currently, the rules fail to establish the "reasonable period" allowed for repair in a manner that "includes consideration of the size and complexity of the repair required" - instead, the rules set an arbitrary 30-day period in all cases. This violates the legislature's requirement that the reasonable period be established in a flexible manner that accounts for the possibility of complex and lengthy repairs.

**The commission agrees with the comment. The "reasonable period of time" requirements were changed to increase the baseline period to 45 days. In addition, repairs greater than 45 days from discovery could qualify for the incentives if their size and complexity warranted, or if accelerating the repair before the next process unit turnaround would result in more emissions than waiting for that turnaround.**

TxOGA indicated that the frequency for scheduling leak surveys is the same as in the proposed GHG Reporting Rule, Subpart W, monitoring provisions. More frequent surveys should offer more incentives because larger leaks will be found and repaired quicker with real and measurable corresponding reductions in emission inventory.

**No changes were made in response to this comment. Section 101.153(b)(1) establishes the upper limit of frequency of an owner's or operator's leak detection survey in order to qualify for the**

**incentives under this rule. As the commenter points out, more frequent surveys may have the beneficial results of smaller inventories to report, less loss of product, and safer working conditions, but are beyond the scope of this rulemaking. The frequency limit of this rule matching the GHG Reporting Rule is coincidental.**

TxOGA pointed out that one simple practice to meeting the requirements of the daily instrument check is to use a disposable butane lighter set low. This is generally equivalent to two grams per hour of butane and can be imaged easily with a properly operating GasFindIR Camera.

**No changes were made in response to this comment. The rule establishes a minimum standard for a daily instrument check by reference to 40 CFR §60.18(i)(2). This requires the camera operator to "use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent." The camera operator is thus allowed any daily instrument check method that meets this standard.**

TCC commented that it is reasonable to require training on the various makes of optical gas imaging instruments. However, the technology is developing rapidly, and there are several models in the market. It would not be efficient to require 24 hours of training every time there is a new model, particularly in those situations where there is only a slight change between the models.

**The commission agrees that a 24-hour course is not required to train optical gas imaging instrument operators on new models because slight changes from a previous model on which they**

**have been trained can be covered in a shorter course. In response to this comment, and to simplify the requirements, the requirements for "specific make and model" were deleted from the rule text.**

TxOGA agreed with the requirement that the operator of the optical gas imaging instrument must receive a minimum of 24 hours of initial training. TxOGA notes that this is the typical course length for both the training offered by FLIR Systems, Inc. and the more industry focused training offered by some third parties.

**The commission appreciates the comment.**

TxOGA disagreed with §101.153(b)(4)(B)(i) stating that the provision is burdensome and unnecessary.

**No changes were made in response to this comment. The cited requirement is one of two ongoing training options, and would be selected for those operators who are unable to record at least 100 hours of camera use annually, or are able to record 100 hours camera use but desire to record their training demonstration through the training class. Over a year's time, an operator only spending two hours a week for 50 weeks of the year will easily satisfy this requirement. This represents total camera experience time, not just imaging. This experience requirement is necessary to maintain operator proficiency.**

TxOGA considered §101.153(b)(4)(B)(ii) to be arbitrary and stated that two days per year for training should be sufficient to maintain skill level and would allow better workforce scheduling.

**No changes were made in response to this comment. The requirement for a minimum 100 hours experience is expected to subject the camera operator to a variety of operating conditions that refreshes almost all of the optical gas technology's (camera's) operations, settings, etc. The 100 hours of experience is one of two options, and the operator may opt to attend the training as described in §101.153(b)(4)(B)(i) in lieu of the 100-hour experience option.**

TCC agreed that 100 hours of hands-on experience is reasonable on an annual basis, but not necessarily on a calendar year basis. To provide operators with flexibility, TCC requested that the term "per calendar year" be amended to "annually." Additionally, not all operators maintain written logs – some logs are maintained electronically - and TCC requested that the term "written log" be changed to "record."

**In response to comment, the commission has revised the experience option in §101.153(b)(4)(B)(ii) to 100 hours annually, rather than per calendar year, and replaced the requirement for "a written log" with "a record."**

TxOGA noted that leaks detected by optical imaging can be found remotely by line-of-sight in elevated or difficult to access locations relative to Method 21 where the measurement technician has to be in close proximity to the component. Therefore, in §101.153(d)(1) provisions should be made for delay of repair options or where isolation for repair is not possible or immediately practical. Furthermore, TCC requested the addition of delay of repair language that mirrors the language currently found in 30 TAC §115.352(2). Specifically, since the program applies to components that traditionally are not required to be monitored, it is reasonable to allow a delay of repair, particularly in those instances where it is not easily determined how to fix the leak or when additional parts or equipment must be brought into the plant to fix the leak.

**The commission agrees with the comment for occasions that warrant additional time and has increased the baseline repair time to 45 days, and has added two exceptions to the baseline: allowing for the repair to be delayed to the next process unit shutdown if immediate shutdown would cause more emissions, and those repairs that would require more time based on size and complexity.**

TCC questions the language regarding nuisance §101.153(d)(1) and (2) because this language would be difficult to enforce since the language is referring to a nuisance that may have already occurred.

**No changes were made in response to this comment. To clarify, this criterion will be enforceable if a documented nuisance can be attributed to the leak or its repair made under this program, and if so, an incentive would not be awarded.**

TCC commented that due to storage issues associated with recordkeeping, TCC supports a recordkeeping plan that requires documentation of each inspection but only requires the owner or operator to maintain digital recordings where an actual leak has occurred. Additionally, TxOGA agrees that recordkeeping requirements of the rulemaking are good practice, including the digital recording requirement provision which only requires recording of observed leaks and not for all components as verification that the survey was performed. Any change in provisions to require recording all components regardless of leak or no leak would place an undue burden on the operator and would generate an unmanageable amount of video both in terms of retrieval and in memory capacity requirements.

**As a result of the comment and to ensure clarity of the recordkeeping requirements, the phrase "of leaks and repairs" was added to §101.153(e)(1)(C) and (D). Because the purpose of this program is to discover and repair leaks, the commission agrees that there is no need to maintain records where no leaks were discovered.**

TxOGA indicated that digital recording recordkeeping management can be time consuming and may not be compatible with company computer networks or security protocols. Since these recordings can use large amounts of storage memory, a practical suggestion is to keep video recording durations under ten seconds per recording. Non-proprietary file format should be defined to avoid confusion or unnecessary file format conversions.

**No changes were made in response to this comment. Each specific situation and the conditions under which the recordings were made will likely determine the duration and an artificial limit of ten seconds may result in imaging records that do not satisfy the requirements of the rules. The phrase "non-proprietary format" is a widely accepted standard and generally understood to be a file format that can be accessed or viewed using ordinary computer software.**

Sierra Club agreed with the TCEQ in its decision not to offer as incentives credits or offsets to a facility's emissions reduction requirements, exceptions from reporting requirements, and scheduling of compliance incentives.

**The commission appreciates the comment.**

TPA commented that the TCEQ should expand the incentives available to owners and operators wishing to use innovative leak-detection technologies. Specifically, the commission should attempt to expand the incentive program so that owners and operators are given a wider variety of incentives for using the innovative leak-detection technologies that now exist.

**No changes were made in response to this comment. The commission reviewed the statute, held two stakeholder meetings and solicited comment through the rule proposal requesting suggestions for incentives. The statute suggests four possible incentives. The first suggested incentive is on-site technical assistance, which is currently available through the Small Business and Local Government Assistance Pollution Prevention program, which is available but not included in the rules. The second, to include in compliance history or compliance summary by providing a potential penalty reduction through the voluntary emission reduction mechanism in the compliance history program, is included in new §101.155.**

**The remaining two suggested by statute, consideration in scheduling and conducting compliance inspections and providing credits or off-sets to emission reduction requirements. As discussed elsewhere in this preamble, the former is not included in the rules because current compliance inspections are bound by federal requirements. General compliance inspection schedules are set by the Compliance Monitoring Strategy mandated by EPA, and Title V permit inspections are part of the Federal Operating Permit Program overseen by EPA. The latter is not included in the rules because in order for an emission to be creditable against state and federal emission limits they must be quantifiable, enforceable, permanent, and surplus. It is not practical to quantify emissions directly from the optical gas technology when viewing a source that has authorized emissions. The**

**user of this technology will be unable to distinguish quantity above or below the limit, and thus will be unable to determine if there is an exceedance or over-control of the authorized emissions. In a leak situation where there is no allowable emission rate (the authorized rate equals zero), there is no surplus.**

**During two stakeholder meetings, five other incentives were offered. None of the five from those meetings were included in the proposed rules. Three of the suggestions, extending the repair time under a fugitive rule (like ethylene maximum achievable control technology), leaks found earlier than required and not be counted toward a leak rate, and greater percentage reduction over established emissions reduction when implementing a traditional fugitive repair program, are not available because the statute requires the leak to be found and repaired on a component that is not subject to commission rules for LDAR in effect on the date of detection. Those three suggestions are all subject to a commission rule for LDAR in effect on the date of detection. A fourth suggestion was not reporting the leak under emissions inventory, but is inconsistent with 30 TAC §101.10 and the SIP. The last stakeholder suggestion was an incentive to recalculate the upcoming Section 185 fees. However this idea cannot be considered as an incentive because the Section 185 rules have not been adopted and an incentive cannot be designed for a non-existent requirement.**

**Finally, commission staff considered three additional incentive ideas. Of the three, conditional limit to enforcement action appeared to meet all of the statutory requirements and without other legal restrictions; and it is implemented in §101.155. The second suggestion, which was to not report an emissions event meeting a Reportable Quantity under Chapter 101, could not be adopted because it is inconsistent with 30 TAC §101.201 and federal requirements of the SIP. The remaining idea**

**considered, which was to not report a deviation under a Title V permit, could not be adopted because it is inconsistent with 30 TAC §122.145 and federal requirements of the Title V permit program.**

**No other specific suggestions were received in response to the proposed rules.**

TPA asked that the TCEQ revise the rules to comply with other requirements mandated by HB 1526. Specifically, §101.155 fails to contain the provisions that are required in THSC, §382.401(d)(3) and (4). In the commission's preamble it is stated that the commission cannot implement the incentives required by THSC, §382.401(d)(3) and (4) because to do so would conflict with current state and federal requirements. TPA commented that the commission has no legal ability, however, to disobey an Act of the Legislature, regardless of the commission's views concerning a possible conflict between HB 1526 and other laws or regulations. This is not a question of interpretation of vague statutory language for the requirements set forth in THSC, §382.401(d)(3) and (4) the Legislature could have inserted the "to the extent consistent with federal requirements" provision that is set forth in the THSC, §382.401(e), but the Legislature did not. Accordingly, TPA submitted that the commission has no choice but to follow the will of the Legislature and to write into the rule the exemptions required by HB 1526, as codified in THSC, §382.401(d)(3) and (4). TPA acknowledged the commission's hesitance to implement rules that, in the commission's view, contradict federal requirements. TPA recommended the commission include all of the incentives required by HB 1526 but to make certain of those incentive applicable only upon approval by EPA.

**The commission made no change in response to this comment. The incentive program is a requirement of state law and is not a requirement of federal law. Therefore, the rules in this subchapter are not being submitted to EPA as a revision to the SIP.**

**THSC, §382.401(d), provides that as part of the program of incentives adopted under THSC, §382.401(b) that the program include four components, which are styled as "incentives." The first two, in THSC, §382.401(d)(1) and (2), are to ensure that certain leaks detected by voluntary use of alternative leak detection technology are repaired within an established reasonable period of time. The commission interpreted these as basic program requirements and included them in §101.153. The third and fourth program components, in THSC, §382.401(d)(3) and (4), provide that reporting requirements be limited only to those whose components that are not repairable within the commission's established reasonable repair time, and to provide exemptions from commission enforcement for leaks repaired within the established reasonable repair time. In contrast to THSC, §382.401(d)(1) and (2), which are basic elements related to the purpose of the use of the camera, THSC, §382.401(d)(3) and (4) may be considered to be program incentives because these are related to compliance with THSC, §382.401(d)(1) and (2). The commission must interpret THSC, §382.401(d) considering that the legislature would not adopt any statute that is unreasonable or impossible for the commission to implement. Because THSC, §382.401(d) specifically references THSC, §382.401(b), it is reasonable for the commission to interpret these four components as part of the overall program, and not as independent, separate requirements or incentives. The absence in THSC, §382.401(d) of the legislature including a limitation based on consistency with federal law for the incentives allows and is reasonable for the commission to determine applicable federal law prior to establishing the incentives in commission rule. Further, subsection (e) specifically provides**

**that the exemption from enforcement for any violation of law or a permit is specifically conditioned upon consistency with federal requirements. Inclusion of THSC, §382.401(d)(3) and (4) would be inconsistent with federal requirements, specifically the Texas SIP and the Title V Permitting Program under the Federal Clean Air Act. The Texas SIP includes reporting requirements for emissions associated with leaks and repair of leaks, such as for emissions inventories in §101.10 and excess emissions in §101.201 and §101.211. Reporting is also required by some permits which are also a part of the Texas SIP. Texas' approved Title V permitting program requires deviation reporting under 30 TAC §122.145, which is any indication of noncompliance with a term or condition of the permit as found using compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. Federal Clean Air Act, §502(a), 42 USC, §7661a, states that it is unlawful to violate any federal operating permit requirement or to operate in any way except in compliance with a permit. In addition, the commission has submitted, and EPA has previously approved, §101.221(d) which states, in part, that "the commission will not exempt sources from complying with any federal requirements. . ." Federal requirements include all authorizations, both those in the new source review program and federal operating (Title V) permits, as well as most of the TCEQ's air quality rules and air quality plans, as well as applicable federal rules.**

**Also, the Texas Title V program requires a set frequency of compliance certification reviews and on-site investigations to satisfy the Compliance Monitoring Strategy as required by EPA. Failure to satisfy that strategy could result in EPA identifying concerns and taking action regarding the administration of the program. Therefore, scheduling of compliance inspections, as provided for in THSC, §382.401(b)(2)(B) was not addressed as an incentive in this adopted rulemaking.**

**In addition, both the SIP and the Title V Permitting Program do not allow any exemption from enforcement and also require that the commission have the authority to enforce both programs (*see* 42 USC, §7413). Failure to do so can result in a SIP call by EPA, withdrawal of permit program authorizations or other measures including sanctions (*see* 42 USC, §7509 and §7661a). The commission is therefore limiting the incentive regarding exemption from enforcement and adopts the text of the statute which provides that, to the extent consistent with federal requirements, the commission may not take an enforcement action against a program participant owner or operator of for a leak or emission of an air contaminant detected using alternative technology and would not have been detected under the commission's LDAR program.**

**In addition, the commission has submitted, and EPA has previously approved, §101.221(d) which states, in part, that "the commission will not exempt sources from complying with any federal requirements. . . ." Federal requirements include all authorizations, both those in the new source review program and the federal operating (Title V) permits, as well as most of the TCEQ's air quality rules and air quality plans, as well as applicable federal rules. Therefore, to maintain the integrity of, and compliance with, the Texas SIP and the Title V Federal Operating Permitting Program, as well as to comply with THSC, §382.401(e), the commission cannot implement and is not implementing THSC, §382.401(d)(3) and (4) as incentives for the program required by THSC, §382.401(b) and (d).**

**On March 26, 2007, which was during the legislative session, EPA–Region 6 expressed its opinion regarding HB 1526. EPA's letter to John Steib, Deputy Director of the TCEQ Office of Compliance**

**and Enforcement stated that EPA generally supports use of any advanced technology that can achieve environmental benefits, but must ensure that their use conforms to applicable EPA rules and policies, and the technology does not undermine the goals and benefits of those rules and policies. EPA expressed concern with the language of offsets (which is discussed elsewhere in this preamble). EPA also expressed concern about exemption from enforcement for excess emissions, stating that all periods of excess emissions must be considered violations, and although certain episodes of excess emissions may be eligible for an affirmative defense or enforcement discretion, they may not be exempted from enforcement. Finally, EPA expressed concern about how the program would impact Title V credible evidence requirements, and stated that barring enforcement action could be grounds for a SIP call, withdrawal of permit program authorizations, or other appropriate measures. Therefore, the commission did not seek, expect, or receive comments on the proposed rules from EPA as to whether the rules would comply with federal requirements which include the SIP.**

TPA again urged that, given the problems noted above, proposed §101.155 should be rewritten in its entirety.

**The commission made no change in response to this comment. The commission respectfully disagrees that the comments describe any problems that would result in the need to re-propose this section.**

TxOGA commented that the program incentives are all discretionary-based and subjective. TxOGA recommended a tiered incentive based on annual hours of IR camera monitoring per production unit and/or amount of mass emissions reductions achieved by leak detection with optical imaging, repair, and

with verified quantities by engineering estimations or supplemental measurement. TxOGA added that this alternative is measured, objective, and would be more appropriate.

**No changes were made in response to this comment. Conditional limit to enforcement action or compliance history-based measures will not be based on a rigorous schedule in the rules. But that does not rule out a comparable discretionary response to each case that may be more appropriate in guidance as the rules are implemented. In other cases, there may not be a graduated incentive. For example, as stated in the preamble, a conditional limit to enforcement action incentive may mean that any order based on a leak repaired under this program will not be assessed a penalty. The rule language allows for flexibility in awarding incentives to leak repairs that qualify.**

TPA asked that additional detail be added to proposed §101.155(1) and (2) because it contains insufficient detail describing the incentives to be offered. Both the terms "enforcement discretion" and "compliance history-based penalty reductions" should be expounded upon. The preamble contains helpful explanatory language, some of which should be inserted into the text of the rules.

**No changes were made in response to this comment. Although the preamble contains one example of what conditional limit to enforcement action may be offered under this program, the rules have been designed to allow flexibility within the program throughout time. With this flexibility as rules and policies change over time, the program incentives may stay intact.**

TCC commented that the offer of enforcement discretion violates the intent of the legislation which clearly states that the commission may not enforce against a facility if the facility complies with the

program and finds emissions not otherwise detectable under the agency's current LDAR program. TCC also noted that the offer to use compliance history as a mitigating factor in cases where a facility is a poor performer actually provides little or no incentive because very few TCC members are classified as "poor performers." TCC requested that the proposed rules be revised to clarify that participation in the program will be used as a positive factor in the compliance history formula.

**The commission agrees with the first part of the comment. The incentive described as "enforcement discretion" has been replaced with the incentive to limit commission enforcement action consistent with federal requirements, mirroring the words of the statute.**

**The compliance history rule, 30 TAC Chapter 60, designates specific components that are included in the compliance history formula. Currently, the compliance history rule does not allow for this type of voluntary program to be included in the formula, and to do so would require the commission to open rulemaking to Chapter 60. The language in this rulemaking is designed to allow flexibility in how the rules are applied; therefore, if the compliance history rule is modified in the future the incentive in this rulemaking may align with the new Chapter 60. While it is understood that very few TCC members are currently poor performers, if a member ever becomes a poor performer in the future, then the compliance history incentive will be available.**

## **SUBCHAPTER C: VOLUNTARY SUPPLEMENTAL LEAK DETECTION PROGRAM**

### **§§101.150, 101.151, 101.153, and 101.155**

#### STATUTORY AUTHORITY

The new sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, that provides the commission with the general powers to carry out its duties under the TWC; TWC, §5.103, concerning Rules, that authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC; TWC, §5.105, concerning General Policy, that authorizes the commission by rule to establish and approve all general policy of the commission; TWC, §7.002, concerning Enforcement Authority; TWC, §7.005, concerning Effect on Other Law; TWC, §7.073, concerning Corrective Action; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The new sections are also adopted under THSC, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state's air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; and THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the proper control of the state's air. The new sections are also adopted under THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe reasonable requirements for the measuring and monitoring of air contaminant emissions; THSC, §382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules; THSC, §382.022, concerning

Investigations, that authorizes the executive director to make or require certain investigations, and THSC, §382.401, concerning Alternative Leak Detection Technology, the commission's establishment of an alternative leak detection technology incentive program; TWC, §5.752, concerning Definitions, which describes the commission's innovative programs; and THSC, §5.754, concerning Classification and Use of Compliance History, that authorizes the commission to establish standards for the classification of a person's compliance history.

The adopted new sections implement THSC, §§382.002, 382.011, 382.012, 382.016, 382.017, 382.021, 382.022, and 382.401; and TWC, §§5.752, 5.754, 7.002, 7.005, and 7.073.

**§101.150. Purpose and Applicability.**

(a) Purpose. The purpose of this subchapter is to provide a program that encourages and provides incentives for voluntary monitoring of components not subject to commission rules for leak detection and repair in effect on the date of detection, using remote sensing technologies, such as optical gas imaging technology. Participation under this subchapter is voluntary. Failure to comply with the requirements of this subchapter results in ineligibility for an incentive in §101.155 of this title (concerning Program Incentives). Failure to comply with any requirement of this subchapter is not a violation of a commission permit or rule subject to commission enforcement action.

(b) Applicability. The following sources are eligible for participation in the program - any authorized equipment or facilities in VOC service, including processing, storage, and transfer:

(1) that are not subject to a required fugitive monitoring program; or

(2) where an alternative leak detection method is not the monitoring method required in a permit or rule.

**§101.151. Voluntary Supplemental Leak Detection Definitions.**

(a) **Alternative leak detection technology** - Technology other than that specified by the United States Environmental Protection Agency Method 21, including optical gas imaging technology, designed to detect emissions of air contaminants.

(b) **Imaging** - A means or process of making emissions visible that may otherwise be invisible to the naked eye.

(c) **Leak** - For purposes of this subchapter, a leak is any emissions imaged by an optical gas imaging instrument, as defined in this section.

(d) **Optical gas imaging instrument** - An instrument that makes emissions visible that may otherwise be invisible to the naked eye.

(e) **Repair** - The adjustment or alteration of a component in order to eliminate a leak.

(f) **Supplemental detection method** - Any leak detection method that supplements or adds to an existing technology approved by the executive director such as 40 Code of Federal Regulations Part 60, Appendix A-7, Method 21 monitoring program.

**§101.153. Voluntary Supplemental Leak Detection Program.**

(a) General program objective. Owners or operators are encouraged to voluntarily and routinely use an alternative leak detection technology to detect and repair leaks not otherwise detectable.

(b) Elements of an approvable program. In order to be considered for approval a program must include, at a minimum:

(1) A schedule for leak surveys to be conducted at least once per year.

(2) If optical gas imaging is the supplemental detection method used, then the leak detection devices shall meet the following specifications:

(A) the requirements of 40 Code of Federal Regulations (CFR) §60.18(i)(1) (December 22, 2008); and,

(B) the requirements of the daily instrument check as specified in 40 CFR §60.18(i)(2) (December 22, 2008).

(3) The daily instrument check must be performed by each person that is performing imaging for that day.

(4) If optical gas imaging is the supplemental detection method used, any person that performs the supplemental leak detection of this subchapter shall comply with the following minimum training requirements:

(A) The operator of the optical gas imaging instrument must receive a minimum of 24 hours of initial training on the optical gas imaging instrument before using the instrument for the purposes of the supplemental leak detection in this section.

(B) Operators using optical gas imaging instruments for this supplemental leak detection shall comply with one of the following requirements for on-going training purposes:

(i) operators shall attend an annual eight-hour refresher training class on the optical gas imaging instrument used for this supplemental leak detection; or

(ii) operators shall maintain a minimum of 100 hours annually of hands-on operational experience with the model of optical gas imaging instrument used for the supplemental leak detection. Operators electing this option shall maintain a written record of the operator's operational experience with the optical gas imaging instrument.

(c) Exceptions. The following information cannot be used to support a program incentive under this subchapter:

(1) where the leak was independently detected, or an investigation of the leak was initiated by the executive director or personnel of any air pollution program with jurisdiction, before the leak was detected by the owner or operator;

(2) information resulting from an audit performed under the Texas Environmental, Health, and Safety Audit Privilege Act; and

(3) emissions from equipment or facilities constructed or modified without authorization.

(d) Repair.

(1) Except to the extent that the size and complexity of the repair warrants a repair period in excess of 45 days, repairs must be completed within 45 days of the leak detected by the alternative leak detection technology. If the repair of a leak within 45 days after the leak is detected would require a process unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled process unit shutdown; and,

(2) The leak and its repair must not have caused a nuisance (as defined in §101.4 of this title (relating to Nuisance)).

(e) Recordkeeping. The owner or operator participating in this program shall maintain records on site, or at a pre-determined off-site location, for five years. Records must be available for inspection by the executive director or local air pollution control program with jurisdiction upon request. The records must include:

(1) If optical gas imaging is the supplemental detection method used:

(A) digital recordings of the leak when first observed;

(B) recordings which document the successful repair of the equipment or component;

(C) all digital recordings of leaks and repairs shall be saved in a non-proprietary file format; and,

(D) the digital recordings of leaks and repairs shall contain information readily available from the camera including date, time, and camera settings.

(2) Documentation demonstrating compliance with approvable program elements listed in subsection (b)(1) - (4) of this section.

(3) The records will include information on the completion of the repair sufficient to demonstrate compliance with this program.

**§101.155. Program Incentives.**

If leaks are detected and repairs are completed and recorded in compliance with this subchapter, one or both of the following incentives will be awarded:

(1) Compliance history-based penalty reductions. The participation of the owner or operator in this program may be applied to the Compliance History in a manner consistent with Chapter 60 of this title (relating to Compliance History); or,

(2) Conditional limit to enforcement action. To the extent consistent with federal requirements, the commission may not take an enforcement action against an owner or operator of a facility participating in the program established under this subchapter for a leak or an emission of an air contaminant that would otherwise be punishable as a violation of the law or of the terms of the permit under which the facility operates if the leak or emission was detected by using alternative technology and it would not have been detected under the commission 's regulatory program for leak detection and repair in effect on the date of the detection.